

Simmons SDS5 Modular Drum Synthesizer



by Bob Saydlowski, Jr.

A major development in drum synthesis is about to unfold. Practically every instrument in the contemporary group has gone electric and/or synthesized, and now the second generation of drum synths is upon us.

I recently met with British inventor Dave Simmons for a demonstration of his *SDS5* drum synth, which I think, is probably *the* innovation of the past five years.

The Simmons *SDS5* sets up and plays just like a regular drum kit. Component choices are left up to the purchaser, from a 4-piece kit, to a double bass drum monster-size set-up, depending on how much one is willing to spend. The *SDS5* kit I saw incorporated snare, bass drum, three toms, and an electronic hi-hat.

Each drum is actually a hexagon-shaped pad measuring 14" across by 2 1/4" deep, excepting the bass drum which is 22" across. The pads are constructed of acrylic and polycarbonate materials, which I'm told, is the same material used in police riot shields. It's pretty well indestructible. The bass drum is free-standing on two large spurs, and will accept mounting of any popular drum pedal. The other pads set up on Pearl 989 tom-tom stands, using their AX-3 adaptors to mount more than two pads on a single stand. All are fully adjustable for height, angle and distance. The pads have aluminum rims which are also "live," and the snare is developed so that a rim shot will yield a slightly different sound. Mounted in each shell, next to the arm receiver, is a male cannon jack for cable plug-in.

Playing the pads takes a little getting used to at first, as it's much like playing on a table top. They are definitely responsive, and even allow for accurate buzz rolls. The player is able to retain his own personal style and technique.

The brain of the *SDS5* is a 19" rack

(also available in a free-standing encased chassis) which houses the power supply, input and output jacks, mixer volume and pad sensitivity controls. Each pad has its own plug-in module set in the front panel of the brain. The rack can accommodate up to seven modules. The modules measure 2" x 5" and are released from the chassis by four screws, allowing easy access if service is ever needed. One good feature of this modular system is, if a module ever fails, only *that* module and not the entire set-up, need be sent out for servicing. One would still have the rest of the kit to use.

Each module is designed for a specific sound (snare cannot produce bass drum etc.) and there are four memories in each module. *Memory 1* is preset at the factory. *Memory 2* is user-programmed by knob-operated pots. *Memory 3* and *4* are programmed by trimmer pots duplicating the functions of the knobs and are easily adjusted with a small screwdriver. Recalling a memory for performance is quick and simple. Press the corresponding button for that memory and the sound that has been programmed in is ready to use. Each module also has an I.E.D. showing which memory is in use, as well as an LED that flashes every time the connected pad is hit. With all the available memories and modules, one could conceivably have a 24-piece kit.

The modules each have the same controls, but as I said, the parameter of each module has been altered to produce certain sounds relative to that module. The program controls are: noise pitch, tone pitch, bend, decay time, noise-tone balance, and click-tone balance. The tone pitch offers a full spectrum from *Roto-toms* to large tympani. An acoustic drum falls off in pitch by only a few semitones; this is duplicated by the bend control. Exaggerated use of the control

would make the regular drum sound unnatural, but it would enable you to get Syndrum-type sounds, though that's not its *intended* function. Decay controls the length of the sound. The click control balances the level of drumstick attack to the drum sound itself.

Pad sensitivity can be controlled for each drum separately to suit your own style of playing, allowing complete dynamic control. The sensitivity on the *SDS5* is the best I've seen on any drum synth. The rack also contains separate volume controls for each drum.

The rear of the rack offers separate pad outputs, or a single output which sends a mix of the drums as dictated by the front panel volume settings. The *SDS5* is also capable of sending out in stereo left and right. The drums may be triggered from an external synthesizer, sequencer, click track, etc. One British drummer is using a Roland *Micro-Composer* to program and play the drums. And there is also an input for the hi-hat foot pedal.

The tom-tom modules can reproduce from a *Roto-tom* to a tympani, and they are all genuine sounds. The bass drum, depending on programming, can range from "studio-tight," to very open and ringy. I was most impressed with the sound capabilities. It should be borne in mind that four sounds are available for *each* pad, all switchable instantly. One could have four different snare sounds at hand for live performance. All the drums have incredible punch, and are capable of studio-treated drum sounds, as well as more open, acoustic type sounds. Granted, the sound is not a mirror image of a normal drum, but it comes the closest of anything else I've ever heard.

Simmons has also developed a hi-hat module which was used in the *SDS5* set-up I saw. Admittedly, the hi-hat sound is

an effect rather than a facsimile. It uses a noise generator to create its sound. The hi-hat can "open" and "close" via a volume-type foot pedal which basically affects the decay time. However, there is one problem. When the pedal is left open, some hi-hat sound leaks onto the snare drum pad. A digitally-controlled hi-hat using real sounds is in the works, as is an electronic ride/crash cymbal.

Obviously, a decent amplification system should be used with the kit. The SDS5 can go direct into any P.A., amplifier; even a studio board.

The pads are available with either black or white playing surfaces and there is a wide selection of shell colors. Since the colors are injected from the inside, there is no way of chipping or scratching them off. Another attraction, for the creative mind, is that the pads may be made in any shape desired. The back page of the brochure depicts a *Human Heads* kit.

An SDS Sequencer is being developed which will enable the user to program up to 32 songs of any duration, and the drums can play back themselves. By the way, the SDS5 will also trigger off of normal drums via a microphone, pickup, etc.

Remember player reaction to the first Moog synthesizer? The first electric bass? After players realized the advantages and possibilities, mass acceptance soon followed. The Simmons SDS5 is a "break in tradition," but it is so revolutionary, it could totally replace a conventional drum kit in some situations. Also, only a floor tom case and trap case is needed to pack and transport the complete kit. The possibilities are endless, especially in the studio, where you could get your drum sound in a matter of minutes saving valuable studio time. Then, if desired, flanging, phasing, delay, or other effects could be added. There is no leakage of sound, since there are no microphones. With more and more electronic bands coming into light, the SDS5 should have a definite position.

The Simmons SDS5 currently sells for approximately \$3,500 and comes complete with stands and cables. Simmons does have an impressive demo cassette available, but the drums really have to be heard live to be appreciated. Dave Simmons has also devised a "suitcase set-up" of SDS5 pads. All the pads are scaled-down and fit into a small flight case which can be hand-carried. Ideal for overdubs in the studio. As of this writing, the SDS5 is a bit difficult to find in the U.S., though the company is attempting to set up a dealer network. For more information, contact: Musicaid, 176 Hatfield Road, St. Albans, Herts. AL1 4JG, ENGLAND.



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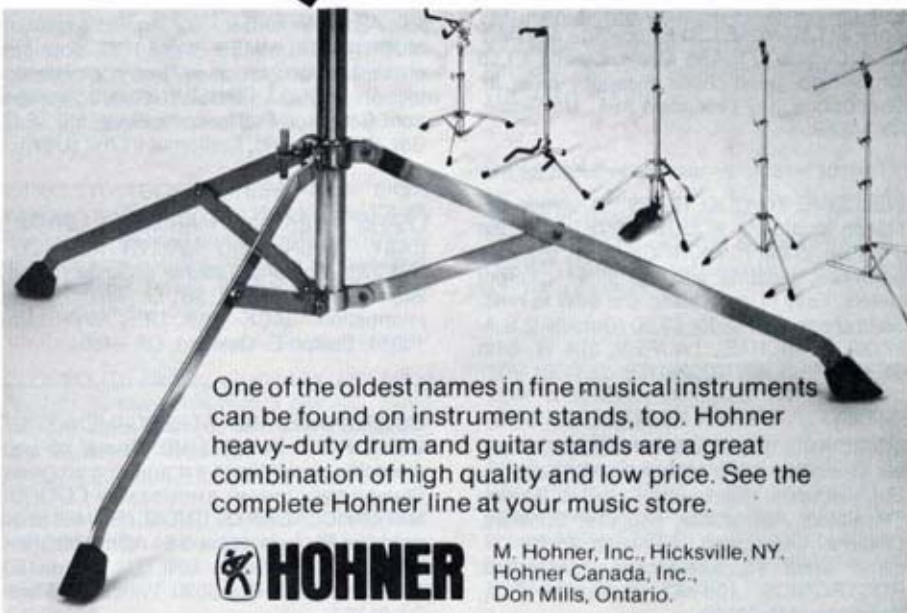
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